

REMARKS

Summary of Amendments

Claims 1-16 are pending, with claims 1, 5, 9 and 13 being in independent form.

Status of Certified Priority Document

Applicant again notes that the Examiner has acknowledged, in the Official Action of May 12, 2004, Applicant's claim to foreign priority, and has indicated that Applicant has filed a certified copy, but neglected to indicate on the form PTOL-326 that "All" of the certified copies of the priority documents have been received in either the Official Action of May 12, 2004 and the Official Action of September 30, 2004.

Accordingly, Applicant respectfully requests that the Examiner indicate such acknowledgment on form PTO-326 by checking off the correct box in the next office action.

Summary of Official Action

In the Office action, the Examiner rejected claims 1-16 over the applied art of record. By the present response and remarks, Applicant submits that the rejections have been overcome, and respectfully requests reconsideration of the outstanding Office Action and allowance of the present application.

Traversal of Rejections Under 35 U.S.C. §103(a)

Over Nishizawa with Hellenbrand

Applicant respectfully traverses the rejection of claims 1 and 2 under 35 U.S.C. § 103(a) as unpatentable over JP 3017741 to NISHIZAWA et al. in view of US patent 5,096,596 to HELLENBRAND et al.

The Examiner acknowledges that NISHIZAWA lacks, among other things, supplying rainwater to a purifier to carry out pH adjustment. However, the Examiner asserts that HELLENBRAND teaches to use pH adjustment in a filtering tank to purify water and that it would have been obvious to one of ordinary skill in the art combine the teachings of these documents. Applicant respectfully disagrees with this rejection and the Examiner's assertions and conclusion.

By way of background, Applicant's invention provides for a method wherein a switching valve 15, a precipitation collection tank 20, and an inlet tube 16 are used to ensure that while some of the rainwater collected from gutter 3 is supplied to the collection tank 20, at least some portion of the collected rainwater is not supplied to the collection tank 20 and is instead removed via the inlet tube 16 and supplied to a purifier 30 to carry out pH adjustment and sterilization. No comparable arrangement is disclosed or suggested in either of NISHIZAWA or HELLENBRAND.

Accordingly, Applicant's independent claim 1 recites inter alia, removing a

P24055.A03

predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, supplying the rainwater to a purifier to carry out *pH adjustment and sterilization* and *supplying the rainwater from the purifier to a storage tank*. Applicant submits that no proper combination of the applied documents renders unpatentable the instant invention.

The Examiner has acknowledged that NISHIZAWA is entirely silent with regard to *supplying rainwater to a purifier to carry out pH adjustment*. However, as Applicant has maintained all along, it is equally clear that this document also fails to disclose or suggest *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*. Indeed, the Examiner has failed to identify any language in this document which would disclose or suggest this feature.

Applicant does not, for example, disagree that NISHIZAWA discloses a rainwater purification tank 3. However, it is clear from a fair reading of drawings that the gutter pipe 4 leads directly into a sedimentation tank 1. Thus, the figures cannot properly be relied upon to disclose or suggest *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*.

Applicant emphasizes that NISHIZAWA mere discloses a sedimentation tank 1 which stores rainwater provided from a gutter 4. The sedimentation tank 1 removes sediments such as dust and sand contained in the rainwater via a dust catcher screen 5 connected to the gutter

4. The Examiner simply must acknowledge that the arrangement shown in the figure delivers all of the collected rainwater to the sedimentation tank 1, and does not provide for any device or arrangement for *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*.

Moreover, Applicant notes that HELLENBRAND fails to cure the above-noted defect of NISHIZAWA. It is also apparent that HELLENBRAND is entirely silent with regard to *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*. Indeed, the Examiner has failed to identify any language in this document which would disclose or suggest this feature.

Moreover, while Applicant acknowledges that HELLENBRAND apparently discloses the use of oxygen (see col. 4, lines 53-56) and MnO_2 (see col. 3, lines 18-23) with water, Applicant submits that the Examiner has failed to point to any specific disclosure in HELLENBRAND with regard to using the MnO_2 as a catalyst to produce oxygen from e.g., hydrogen peroxide.

Applicant further notes, by way of background, that HELLENBRAND relates to aeration system which uses a pressurized environment. The invention, on the other hand, relates to a system which operates under the force of gravity. See Fig.1 of the instant application. Moreover, as NISHIZAWA similarly relates to a gravity system, it would not have been obvious to one of ordinary skill in the art to combine the gravity system of

P24055.A03

NISHIZAWA with the pressurized system of HELLENBRAND, nor is it apparent that the resulting system would benefit from the asserted combination. Indeed, the Examiner has failed to consider and address this reason for non-obviousness.

Thus, Applicant submits that the above-noted document fails to disclose or suggest the features recited in at least independent claim 1. Because no proper combination or modification of the above-noted documents discloses or suggests at least the above-noted features of the instant invention, Applicant submits that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 1.

Furthermore, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify any of the applied documents in the manner asserted by the Examiner. Nor does the Examiner's opinion provide a proper basis for these features or for the motivation to modify either of these documents, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claim 1 is not rendered obvious by any reasonable inspection of these disclosures.

Applicant directs the Examiner's attention to the guidelines identified in M.P.E.P section 2141 which state that "[i]n determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the

P24055.A03

reference before him to make the proposed substitution, combination, or other modification."

In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

As this section clearly indicates, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)."

Moreover, it has been legally established that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) Although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.' 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references)."

Additionally, it has been held that a statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all

P24055.A03

aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levensgood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

Furthermore, Applicant submits that dependent claim 2 is allowable at least for the reason that this claim depends from an allowable base claim and because this claim recites additional features that further define the present invention. In particular, Applicant submits that no proper combination of the above-noted applied documents discloses or suggests, in combination: that the method further comprises carrying out physical filtration at or before an inlet port of the purifier as recited in claim 2.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection under 35 U.S.C. § 103(a) and indicate that these claims are allowable over the applied art of record.

Over Nishizawa with Hellenbrand and Masahiro

Applicant also respectfully traverses the rejection of claims 3 and 4 under 35 U.S.C. § 103(a) as unpatentable over NISHIZAWA et al. in view of US patent 5,096,596 to HELLENBRAND, and further in view of JP 04-007082 to MASAHIRO et al.

The Examiner acknowledges that NISHIZAWA and HELLENBRAND lack, among

P24055.A03

other things, disclosure that the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide. However, the Examiner asserts that MASAHIRO teaches to use hydrogen peroxide to produce active oxygen for sterilization and that it would have been obvious to one of ordinary skill in the art combine the teachings of these documents. Applicant respectfully traverses each of these assertions and conclusions.

Notwithstanding the Office Action assertions as to what each of these documents disclose or suggest, Applicant submits that no proper combination of these documents discloses or suggests, *inter alia*, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, supplying the rainwater to a purifier to carry out *pH adjustment and sterilization* and *supplying the rainwater from the purifier to a storage tank*, as recited in independent claim 1.

As explained above, each of NISHIZAWA and HELLENBRAND failed to disclose or suggest *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*.

Moreover, while Applicant acknowledges that MASAHIRO appears to disclose using oxygen generated from hydrogen peroxide, it is clear from a fair reading of this document that the disclosed system is used only with regard to contaminated water so as to prevent the clogging of pipes. There is no apparent disclosure with regard to collecting rainwater. Nor

P24055.A03

has the Examiner identified any.

Applicant further submits that MASAHIRO is similarly also entirely silent with regard to, among other features recited in the above-noted claims, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, and/or supplying the rainwater to a purifier to carry out pH adjustment and sterilization, and supplying the rainwater from the purifier to a storage tank.*

Thus, Applicant submits that the above-noted documents fail to disclose or suggest the features recited in at least amended independent claim 1. Because no proper combination or modification of the above-noted documents discloses or suggests at least the above-noted features of the instant invention, Applicant submits that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 1.

Furthermore, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify any of the applied documents in the manner asserted by the Examiner. Nor does the Examiner's opinion provide a proper basis for these features or for the motivation to modify these documents, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claim 1 is not rendered obvious by any reasonable inspection of these disclosures.

Furthermore, Applicant submits that dependent claims 3 and 4 are allowable at least

P24055.A03

for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of the above-noted applied documents discloses or suggests, in combination: that the pH adjustment neutralizes the rainwater that is acidic, and the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide as recited in claim 3; and that the method further comprises decomposing and eliminating residual active oxygen species remaining in the rainwater that has been supplied to the storage tank as recited in claim 4.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection under 35 U.S.C. § 103(a) and indicate that these claims are allowable over the applied art of record.

Over Nishizawa with Hellenbrand and Elston

Applicant additionally also respectfully traverses the rejection of claims 5, 6, 9, 10, 13 and 14 under 35 U.S.C. § 103(a) as unpatentable over NISHIZAWA et al. in view of US patent 5,096,596 to HELLENBRAND et al., and further in view of US patent 6,299,775 to ELSTON.

The Examiner acknowledges that NISHIZAWA and HELLENBRAND lack, among other things, disclosure of monitoring upper and lower water levels of the storage tank.

P24055.A03

However, the Examiner asserted that ELSTON teaches using level sensors in a holding or storage tank for collected rainwater, and concluded that it would have been obvious to one of ordinary skill in the art combine the teachings of these documents. Applicant respectfully traverses this rejection.

Notwithstanding the Office Action assertions as to what each of these documents disclose or suggest, Applicant submits that no proper combination of these documents discloses or suggests, inter alia, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, supplying the rainwater to a purifier to carry out *pH adjustment and sterilization*, *supplying the rainwater from the purifier to a storage tank*, and monitoring a water level of the storage tank, and preventing the rainwater from entering the purifier and the storage tank if the water level has reached a predetermined upper limit, as recited in amended independent claim 5, inter alia, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, supplying the rainwater to a purifier to carry out *pH adjustment and sterilization*, *supplying the rainwater from the purifier to a storage tank*, and monitoring a water level of the storage tank, and supplying tap water into the storage tank if the water level of the storage tank has reached a predetermined lower limit, as recited in amended independent claim 9, and inter alia, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, supplying the

P24055.A03

rainwater to a purifier to carry out *pH adjustment and sterilization, supplying the rainwater from the purifier to a storage tank, monitoring a water level of the storage tank, and preventing the rainwater from entering the purifier and the storage tank if the water level of the storage tank has reached a predetermined upper limit, as recited in amended independent claim 13.*

The Examiner has acknowledged that NISHIZAWA is entirely silent with regard to *supplying rainwater to a purifier to carry out pH adjustment*. However, as noted above, it is clear that this document also fails to disclose or suggest *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*.

Moreover, while Applicant does not dispute that HELLENBRAND apparently discloses the use of oxygen (see col. 4, lines 53-56) and MnO_2 (see col. 3, lines 18-23) with water, the Examiner has failed to point to any specific disclosure in HELLENBRAND with regard to using the MnO_2 as a catalyst to produce oxygen from e.g., hydrogen peroxide. Finally, as explained above, HELLENBRAND is entirely silent with regard to *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*.

Finally, Applicant submits that ELSTON contains no disclosure or suggestion with regard to sterilizing rainwater, much less, the preventing process recited in the rejected claims. While Applicant does not dispute that ELSTON discloses a system which can

P24055.A03

recycle waste water for a building, the Examiner has failed to identify any disclosure in this document with regard to, among other features recited in the above-noted claims, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, and/or supplying the rainwater to a purifier to carry out pH adjustment and sterilization, and supplying the rainwater from the purifier to a storage tank.*

Thus, Applicant submits that the above-noted documents fail to disclose or suggest the features recited in at least amended independent claims 5, 9 and 13. Because no proper combination or modification of the above-noted documents discloses or suggests at least the above-noted features of the instant invention, Applicant submits that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claims 5, 9 and 13.

Furthermore, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify any of the applied documents in the manner asserted by the Examiner. Nor does the Examiner's opinion provide a proper basis for these features or for the motivation to modify these documents, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claims 5, 9 and 13 is not rendered obvious by any reasonable inspection of this disclosure.

Furthermore, Applicant submits that dependent claims 6, 10 and 14 are allowable at least for the reason that these claims depend from an allowable base claim and because these

P24055.A03

claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of the above-noted applied documents discloses or suggests, in combination: that the method further comprises carrying out physical filtration at or before an inlet port of the purifier as recited in claim 6; that the method further comprises carrying out physical filtration at or before an inlet port of the purifier as recited in claim 10; and that the method further comprises carrying out physical filtration at or before an inlet port of the purifier as recited in claim 14.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection under 35 U.S.C. § 103(a) and indicate that these claims are allowable over the applied art of record.

Over Nishizawa with Hellenbrand, Elston and Masahiro

Applicant further additionally respectfully traverses the rejection of claims 7, 8, 11, 12, 15 and 16 under 35 U.S.C. § 103(a) as unpatentable over JP 3017741 to NISHIZAWA et al. in view of US patent 5,096,596 to HELLENBRAND et al. and US patent 6,299,775 to ELSTON, and further in view of JP 04-007082 to MASAHIRO et al..

The Examiner acknowledges that NISHIZAWA, HELLENBRAND and ELSTON lack, among other things, disclosure that the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide. However, the Examiner

P24055.A03

asserted that MASAHIRO teaches to use hydrogen peroxide to produce active oxygen for sterilization and that it would have been obvious to one of ordinary skill in the art combine the teachings of these documents. Applicant respectfully traverses each of these assertions and conclusions.

Notwithstanding the Office Action assertions as to what each of these documents disclose or suggest, Applicant submits that no proper combination of these documents discloses or suggests, *inter alia*, removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, supplying the rainwater to a purifier to carry out pH adjustment and sterilization, supplying the rainwater from the purifier to a storage tank, and monitoring a water level of the storage tank, and preventing the rainwater from entering the purifier and the storage tank if the water level has reached a predetermined upper limit, as recited in amended independent claim 5, *inter alia*, removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, supplying the rainwater to a purifier to carry out pH adjustment and sterilization, supplying the rainwater from the purifier to a storage tank, and monitoring a water level of the storage tank, and supplying tap water into the storage tank if the water level of the storage tank has reached a predetermined lower limit, as recited in amended independent claim 9, and *inter alia*, removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, supplying the

P24055.A03

rainwater to a purifier to carry out *pH adjustment and sterilization*, supplying the rainwater from the purifier to a storage tank, monitoring a water level of the storage tank, and preventing the rainwater from entering the purifier and the storage tank if the water level of the storage tank has reached a predetermined upper limit, as recited in amended independent claim 13.

As noted above, NISHIZAWA is entirely silent with regard to *supplying rainwater to a purifier to carry out pH adjustment* and also fails to disclose or suggest *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*.

Moreover, in addition to the fact that HELLENBRAND is entirely silent with regard to *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, the Examiner has failed to point to any specific disclosure in HELLENBRAND with regard to using the MnO_2 as a catalyst to produce oxygen from e.g., hydrogen peroxide.

As also noted above, ELSTON contains no disclosure or suggestion with regard to sterilizing rainwater, much less, the preventing process recited in the rejected claims. ELSTON also similarly fails to disclose or suggest, among other features recited in the above-noted claims, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, and/or supplying the rainwater to a

P24055.A03

purifier to carry out *pH adjustment and sterilization, and supplying the rainwater from the purifier to a storage tank.*

Finally, while Applicant acknowledges that MASAHIRO appears to disclose using oxygen generated from hydrogen peroxide, it is clear from a fair reading of this document that the disclosed system is used only with regard to contaminated water so as to prevent the clogging of pipes. There is no apparent disclosure with regard to collecting rainwater. Nor has the Examiner identified any. This document is similarly also entirely silent with regard to, among other features recited in the above-noted claims, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, and/or supplying the rainwater to a purifier to carry out pH adjustment and sterilization, and supplying the rainwater from the purifier to a storage tank.*

Thus, Applicant submits that the above-noted document fails to disclose or suggest the features recited in at least amended independent claims 5, 9 and 13. Because no proper combination or modification of the above-noted documents discloses or suggests at least the above-noted features of the instant invention, Applicant submits that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 5, 9 and 13.

Furthermore, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify any of the applied documents in the manner asserted by the

P24055.A03

Examiner. Nor does the Examiner's opinion provide a proper basis for these features or for the motivation to modify these documents, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claims 5, 9 and 13 is not rendered obvious by any reasonable inspection of this disclosure.

Furthermore, Applicant submits that dependent claims 7, 8, 11, 12, 15 and 16 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of the above-noted applied documents discloses or suggests, in combination: that the pH adjustment neutralizes the rainwater that is acidic, and the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide as recited in claim 7; that the method further comprises decomposing and eliminating residual active oxygen species remaining in the rainwater that has been supplied to the storage tank as recited in claim 8; that the pH adjustment neutralizes the rainwater that is acidic, and the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide as recited in claim 11; that the method further comprises decomposing and eliminating residual active oxygen species remaining in the rainwater that has been supplied to the storage tank as recited in claim 12; that the pH adjustment neutralizes the rainwater that is acidic, and the sterilization is carried out using active oxygen species produced by decomposition of aqueous

P24055.A03

hydrogen peroxide as recited in claim 15; and that the method further comprises decomposing and eliminating residual active oxygen species remaining in the rainwater that has been supplied to the storage tank as recited in claim 16.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection under 35 U.S.C. § 103(a) and indicate that these claims are allowable over the applied art of record.

***Traversal of the Examiner's Comments of pages 4 and 5 of
the Final Official Action***

The Examiner asserts that the gutter 4 in NISHIZAWA apparently collects rainwater from a roof of a building and that "applicant has not presented sufficient factual evidence to support the above allegation." While Applicant is unsure what is meant by this latter assertion, Applicant notes that whereas the claim language clearly and positively recites, among other things, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, supplying the rainwater to a purifier to carry out pH adjustment and sterilization and supplying the rainwater from the purifier to a storage tank*, NISHIZAWA shows that all of the rainwater collected by the gutter 4 is supplied into a sedimentation tank 1. The invention, in contrast, provides for a method wherein, by way of non-limiting example, a switching valve 15, a precipitation collection

P24055.A03

tank 20, and an inlet tube 16 are used to ensure that while some of the rainwater collected from gutter 3 is supplied to the collection tank 20, at least some portion of the collected rainwater is not supplied to the collection tank 20, and is instead removed via the inlet tube 16 and supplied to a purifier 30 to carry out pH adjustment and sterilization. No comparable arrangement is disclosed or suggested in NISHIZAWA, or in any of the other applied documents. In fact, as noted above, NISHIZAWA does not even arguably disclose removing a predetermined quantity of initial precipitation, as recited in the independent claims.

The Examiner asserts “that the use of a catalyst to produce oxygen from hydrogen peroxide is not recited in the instant claims.” Applicant reminds the Examiner that at least claims 3, 7, 11 and 15 broadly recite that the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide, that the above-noted language is one non-limiting way to produce this result, and that this recited feature is not taught by any of the applied documents.

Finally, the Examiner asserts that because Applicant has not recited a gravity system, the Examiner is free to combine a gravity system with a pressurizes system. Such statements ignore the fact that the Examiner has the burden of making out a prima facie basis of obviousness and that an obviousness rejection must be based on more than merely combining the teachings of two documents. Applicant reminds the Examiner that there must be some motivation or rational for one of ordinary skill in the art to combine the teachings of the

P24055.A03

documents.

CONCLUSION

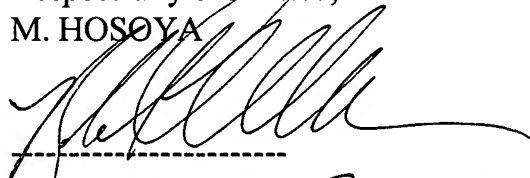
Applicant respectfully submits that each and every pending claim of the present invention meets the requirements for patentability under 35 U.S.C. §§ 112, 102 and 103 and respectfully requests the Examiner to indicate allowance of each and every pending claim of the present invention.

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicant's invention, as recited in each of the pending claims. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

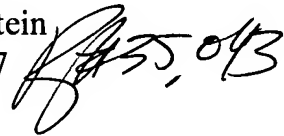
Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

The Commissioner is hereby authorized to charge any fees necessary for consideration of this amendment to deposit account No. 19-0089.

Respectfully submitted,
M. HOSOYA



Bruce H. Bernstein
Reg. No. 29,027



November 29, 2004
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191